# Michigan Department of Community Health

Survey of Pharmacists 2006

#### INTRODUCTION

The Michigan Department of Community Health (MDCH) asked Public Sector Consultants Inc. (PSC) to conduct a survey of licensed pharmacists in 2006 to gather information about their employment characteristics, education, and work environment. A total of 6,224 pharmacists received the survey with their license renewal application. Responses were received online or by return mail from 3,616 pharmacists, for a response rate of 58 percent and a margin of error of  $\pm$  1.1 percent with 95 percent confidence.

The high response rate for the survey suggests that the data are representative of all licensed pharmacists in Michigan. It also allows comparison to findings from the 2005 Survey of Pharmacists. While the responses are often nearly identical, differences in the data that fall outside the margin of error are noted. As of October 2006, a total of 11,920 pharmacists are licensed in Michigan. Key survey findings are presented below.

#### **EMPLOYMENT CHARACTERISTICS**

- About 92 percent (10,966 of 11,920) of pharmacists licensed in Michigan are *active*—that is, they are working as a pharmacist full or part time. Analysis of data in this report focuses on active pharmacists.
- Only about 3 percent of licensed pharmacists are temporarily not working and not looking for a job; 2 percent are retired with no plans to return to work; and 3 percent are employed, but not in pharmacy.
- About 83 percent of active pharmacists are employed full time—30 or more hours per week.

**EXHIBIT 1**Employment Characteristics of Pharmacists, 2006

	Percentage of all pharmacists	Percentage of active pharmacists only
30 or more hours per week in pharmacy or related area	76%	83%
Fewer than 30 hours per week in pharmacy or related area	15	17
Employed, but not in pharmacy	3	_
Not employed and seeking employment outside of pharmacy	1	-
Temporarily not working and not looking for a job	3	-
Retired and not practicing with no plans to return to work	2	-

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

#### PRACTICE SITE AND POSITION

The main practice site for almost all (97 percent) of the active pharmacists licensed in Michigan is in the United States. Thirty-seven percent of active pharmacists, the largest percentage among those responding, are employed at a chain/mass merchandiser. This is a difference from the cohort surveyed in 2005, 41 percent of whom were employed by a chain/mass merchandiser. About 25 percent of active pharmacists are employed in a hospital/health system inpatient setting. (See Exhibit 2.)

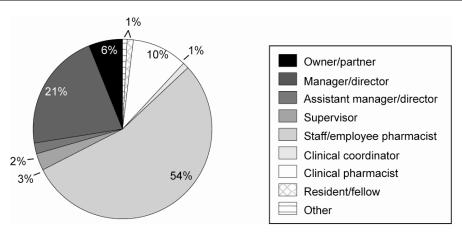
**EXHIBIT 2**Primary Practice Site of Pharmacists, 2006

Primary practice site	Percentage of active pharmacists
Chain/mass merchandiser (>15 sites)	37%
Hospital/health system inpatient	25
Community independent (1 site)	11
Multi-unit community (2-14 sites)	7
Hospital/health system outpatient	6
Long-term care/nursing home/hospice	3
Home IV infusion/home health care	2
Pharmacy education/university	2
Pharmaceutical manufacturing (industry)	2
Managed care	2
Local or state government agency	1
Temporary agency	<1
Nuclear pharmacy	1
Other	1

SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006. NOTE: Percentages do not equal 100 percent due to rounding.

- About 14 percent of pharmacists report that their primary practice site is located in a supermarket or grocery store.
- About 6 percent of pharmacists are an owner/partner in their primary practice site; 21 percent are a manager/director (see Exhibit 3).

**EXHIBIT 3**Position of Pharmacist in Primary Practice Site, 2006

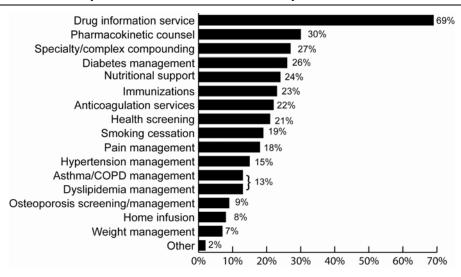


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

#### PHARMACY SERVICES OFFERED

About 81 percent of pharmacists report that they provide direct care or counsel to their patients at their primary practice site. Pharmacists also were asked to identify from a list of services the types of services offered at their primary practice site (see Exhibit 4). The service identified most often out of the choices offered was "drug information service"; 69 percent of pharmacists report that this service is offered at their primary practice site. Fewer pharmacies represented by the 2006 cohort offered specialty/complex compounding (27 percent) than the 2005 cohort (30 percent). More pharmacies represented by the 2006 cohort offered immunizations (23 percent) than the 2005 cohort (19 percent).

**EXHIBIT 4**Pharmacy Services Offered at Primary Practice Site, 2006

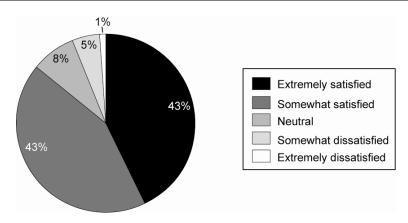


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

#### PROFESSIONAL SATISFACTION

When asked to rate their overall professional satisfaction as a pharmacist, 43 percent of pharmacists report that they are extremely satisfied; another 43 percent are somewhat satisfied. (See Exhibit 5.)

**EXHIBIT 5**Active Pharmacists' Professional Satisfaction, 2006

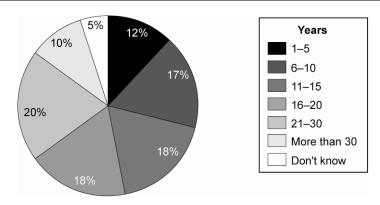


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

#### PLANS TO CONTINUE PRACTICE

Twenty-nine percent of active pharmacists indicate that they only plan to practice pharmacy for one to ten more years. In the 2005 cohort, twenty-six percent planned to continue practicing that long. (See Exhibit 6.)

**EXHIBIT 6**Active Pharmacists' Plans to Continue Practicing, 2006



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

#### **EDUCATION AND CERTIFICATION CREDENTIALS**

Pharmacists responding to the survey were asked whether they received their first pharmacy degree in Michigan, another state, or another country. They also were asked to indicate their highest degree achieved and select their certification credentials from a list of choices (see Exhibit 7).

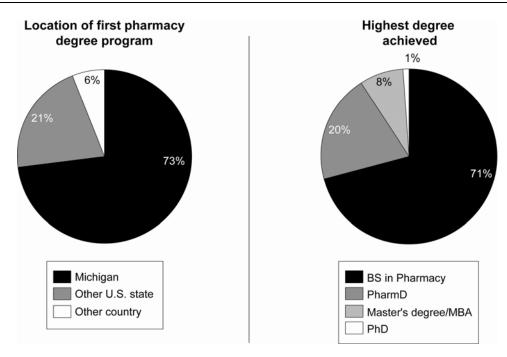
- Seventy-three percent of active pharmacists received their first pharmacy degree from a program in Michigan; 21 percent received their first degree from a program in another state; and 6 percent received their first degree in another country.
- Approximately 71 percent of active pharmacists have a Bachelor of Science in Pharmacy. Of the 2005 cohort, 74 percent had a Bachelor of Science in Pharmacy.
- About 20 percent of active pharmacists have a PharmD.¹ In 2005, 18 percent had a PharmD.
- Eight percent of active pharmacists hold a master's degree and/or master of business administration (MBA) degree, and 1 percent hold a doctorate (PhD).
- Three percent of active pharmacists hold certification credentials as a board certified pharmacotherapy specialist. Two percent of active pharmacists hold certification credentials as either a certified diabetes educator or certified geriatric pharmacist. One percent or fewer hold certification credentials in the other areas listed: certified disease manager, board certified nuclear pharmacist, board certified nutrition support pharmacist, board certified oncology pharmacist, and board certified psychiatric pharmacist.

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<sup>&</sup>lt;sup>1</sup> The PharmD degree (Doctor of Pharmacy) is neither an undergraduate degree (e.g., BS, BA) nor a graduate degree (e.g., MS, MBA, PhD), but rather an entry-level professional degree for pharmacists. After completing the required prerequisite classes (a minimum of two years), the course of study includes four years of professional coursework. This coursework prepares students for the general practice of pharmacy, providing them with the competencies necessary to deliver pharmaceutical care in any pharmacy practice setting.

**EXHIBIT 7**Education Background of Active Pharmacists, 2006

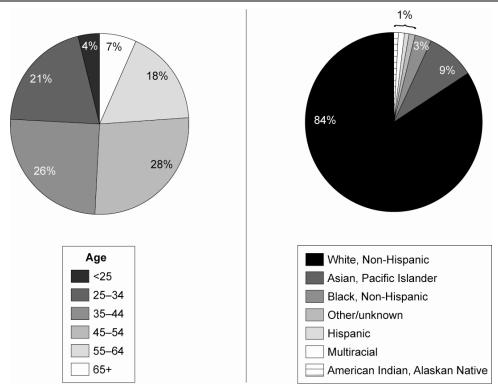


SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006. NOTE: Data presented are for *active* pharmacists licensed in Michigan. Percentages do not equal 100 percent due to rounding.

### **GENDER, AGE, RACE, AND ETHNICITY**

- Fifty-five percent of *active* pharmacists are male; 45 percent are female.
- Twenty-five percent of active pharmacists are aged 55 or older. Twenty-one percent of active pharmacists in the 2005 cohort were aged 55 or older.
- Eighty-four percent of active pharmacists are white, 9 percent are Asian or Pacific Islander, 3 percent are African American, 1 percent are American Indian/Alaskan Native, and 1 percent are Hispanic.

**EXHIBIT 8**Age, Race, and Ethnicity of Active Pharmacists, 2006



SOURCE: Michigan Department of Community Health Survey of Pharmacists 2006.

NOTE: Data presented are for *active* pharmacists licensed in Michigan. Percentages do not equal 100 percent due to rounding.

#### **METHODOLOGY**

The Michigan Department of Community Health (MDCH) contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of pharmacists. The survey was designed in collaboration with the Michigan Pharmacists Association. The instrument contained questions about employment status, education and certifications, services offered at primary practice sites, professional satisfaction, the length of time that the respondent intended to continue practicing, as well as a number of demographic questions (age, gender, race/ethnicity). (The survey instrument and response frequencies are provided in the appendix.)

The sample for this survey was drawn from the Michigan licensure files maintained by the MDCH. All pharmacists are required to renew their license every two years from their first year of licensure. Therefore, the universe of pharmacists is divided into two cohorts of roughly equal size. For 2006, 6,224 pharmacists were eligible for license renewal. The surveys were mailed to all pharmacists renewing their license in 2006 along with their license renewal forms. Pharmacists could either return the two-page paper version of the survey with their renewal or alternatively complete both the survey and their license renewal online. Combining the responses from the paper version with the results from the Web survey resulted in a final total of 3,616 returned surveys, yielding a margin of error of  $\pm$  1.1 percent with 95 percent confidence. This total includes fully and partially completed surveys (i.e., those with information missing for one or more variables); thus sample size for individual variables will differ and the margin of error may change slightly depending upon the amount of missing data for that particular variable.

## Survey Instrument and Response Frequencies (N=3,616)

This survey was designed by the Michigan Pharmacists Association to gather information about the employment, education, and work environment of pharmacists in Michigan. The information you provide will be confidential; the identity of individual respondents will not be shared with anyone. Completion of the survey below is voluntary and does not affect your license. The information is important, however, and your participation is encouraged and truly appreciated. Please complete the survey and return it with your renewal application in the envelope provided.

If you renew your license via the Internet, you will have the opportunity to complete this survey online.

1. In what year were you born?

Age	Percentage		
Active			
<25	<1%		
25–34	21		
35–44	26		
45–54	28		
55–64	18		
65+	7		
NOT Active			
<25	0%		
25–34	6		
35–44	16		
45–54	25		
55–64	20		
65+	34		

2. What is the highest degree you have achieved? (Check **one**)

BS in Pharmacy	71%
PharmD	20
Master's Degree/MBA	8
PhD	1

<sup>\*</sup> Unless otherwise noted, all frequencies are for the pharmacists who indicated they are "active," working as a pharmacist full or part time.

3. What is your current employment status? (Check **one**)

	All	Active only
30 or more hours per week in pharmacy or related area	76%	83%
Fewer than 30 hours per week in pharmacy or related area	15	17
Employed, but not in pharmacy	3	
Not employed and seeking employment outside of pharmacy	1	
Temporarily not working and not looking for a job	3	
Retired and not practicing with no plans to return to work	2	

4. Identify your current primary practice site. (Check **one**)

None (not active in pharmacy) Skip to 11	<1%
Hospital/health system inpatient	25
Hospital/health system outpatient	6
Community independent (1 site)	11
Multi-unit community (2–14 sites)	7
Chain/mass merchandiser (>15 sites)	37
Long-term care/nursing home/hospice	3
Home IV infusion/home health care	2
Local or state government agency	1
Pharmacy education/university	2
Pharmaceutical manufacturing (industry)	2
Managed care	2
Temporary agency	<1
Nuclear pharmacy	1
Other:	1

5. Is your primary practice site in a supermarket or grocery store?

Yes	14%
No	86

6. For your primary practice site, which of the following best describes your position? (Choose *only* one)

( )	
Owner/partner	6%
Manager/director	21
Assistant manager/director	2
Supervisor	3
Staff/employee pharmacist	54
Clinical coordinator	1
Clinical pharmacist	10
Resident/fellow	1
Other:	1

7. Do you (as an individual pharmacist) provide direct care or counsel to your patients at your primary practice site?

Yes	81%
No	19

8. Which of the following services are offered at your primary practice site? (Check *all* that apply)

that apply)	
Specialty/complex compounding	27%
Drug information service	69
Home infusion	8
Immunizations	23
Health screening	21
Smoking cessation	19
Nutritional support	24
Pharmacokinetic dosing	30
Anticoagulation services	22
Diabetes management	26
Dyslipidemia management	13
Hypertension management	15
Asthma/COPD management	13
Osteoporosis screening/management	9
Pain management	18
Weight management	7
Other:	2

9. Is your primary practice site in the United States?

Yes	98%
No	2

10. What is the ZIP code of your primary practice site?

11. Did you graduate from a pharmacy program in Michigan, in another state, or in another country? (Please check where you received your **first** pharmacy degree)

Michigan	Ž		73%
Another state			21%
			21/0
Another country			6

12. Do you hold any of the following certification credentials? (Check **all** that apply)

. Do you hold any of the following certification credentials: (Check <b>an</b> that apply)		
Certified diabetes educator (CDE)	2%	
Certified disease manager (NIPCO)	1	
Certified geriatric pharmacist	2	
Board certified nuclear pharmacist	1	
Board certified nutrition support pharmacist	1	
Board certified oncology pharmacist	1	
Board certified pharmacotherapy specialist	3	
Board certified psychiatric pharmacist	1	

13. Do you live in the United States?

Yes	97%
No	3

14. Overall, how would you rate your professional satisfaction as a pharmacist?

overan, now would you rate your professional satisfaction as a pharmacist	-
Extremely satisfied	43%
Somewhat satisfied	43
Neutral	8
Somewhat dissatisfied	5
Extremely dissatisfied	1

15. What is your gender?

Male	55%
Female	45

16. What is your race/ethnicity?

American Indian/Alaskan Native	1%
Asian or Pacific Islander	9
Black, non-Hispanic	3
Hispanic	1
White, non-Hispanic	84
Multiracial	1
Other	1

17. To assist us in projecting the supply of pharmacists in the future, please tell us how much longer you plan to practice pharmacy.

1–5 years	12%
6–10 years	17
11–15 years	18
16–20 years	18
21–30 years	20
More than 30 years	10
Don't know	5
Not practicing now, with no plans to return to work	<1

Thank you!